One rather peculiar feature, however, has been noticed in this patient, and that is that during the past two years there has been a tendency for the condition to become better and worse at times. The repetition of words never completely disappears, but there will often be periods of two or three weeks during which it is barely noticeable. These cycles bear no relationship to medication, or to any other external feature that can be discovered.

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### UMBILICAL ENDOMETRIOMA

By Elmer M. Bingham, M. D.

AND
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PNDOMETRIOSIS of the umbilicus, or umbilical endometrioma (adenomyoma), is one of those rare conditions which is reported singly or in small groups of cases. Spitz, reviewing the literature in 1932, found fifty-four reported cases and added one of his own. In 1933, Lanos and

Busser<sup>2</sup> reported one case, and Herberz<sup>8</sup> three cases. With the last published case by Galasso, Sherman, and Burn,<sup>4</sup> the total to date is sixty. Nearly half of these have been reported in the last decade.

The above authors, with Heaney,<sup>5</sup> Cullen,<sup>6</sup> and Lemon and Mahle,<sup>7</sup> have well covered the theories as to the origin of these tumors. While not malignant, these growths of ectopic endometrial tissue have been known to recur and to metastasize. In view of the frequency with which operative procedures precede the appearance of these tumors, the theory of implantation and transplantation should possibly be given more credence. Cullen <sup>8</sup> states that adenomyomata occurring in abdominal scars are due to transplants, while those of the umbilicus are due to embryonic inclusions.

The case reported here is the second occurring in negroes.

#### REPORT OF CASE

Mrs. H. M., a negro woman of thirty-eight years, was admitted to the Riverside County Hospital on October 3, 1932. She complained of a hard mass in the region of the umbilicus, first noticed four months before, and rather painful at times. She had had a hysterectomy six years previously, at which time a ten-pound fibroid was removed. She had been married eleven years; no pregnancies. General examination showed a moderate hypertension. There was a surgical scar extending from the symphysis pubis to two inches above the umbilicus. There was a firm tumor mass two centimeters in diameter at the lower margin of the umbilicus, medial to the scar, irregular and nodular. It protruded into the umbilicus only slightly. Laboratory: Blood Wassermann, negative; urinalysis, trace of albumen; hemoglobin, 65 per cent.

On October 7, under spinal anesthesia, this tumor was removed. It was found necessary to remove a section of the peritoneum, four centimeters in diameter, in order to surround the mass which was adherent

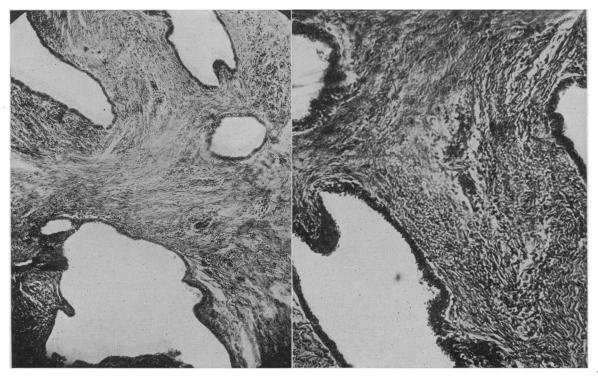


Fig. 1.—Umbilical Endometrioma, Low power field.

Fig. 2.—Umbilical Endometrioma. High power field.

to it. Convalescence was uneventful, except for slight serous drainage from the lower angle of the wound.

Pathological Report.—Report by the College of Medical Evangelists, Loma Linda, follows: Specimen consists of the umbilicus and surrounding tissues, 9 by 5 by 3.5 centimeters. An irregular area of scarring beneath the umbilicus contains a number of canalis filled with chocolate-like material. Microscopic section contains a number of collections of glands resembling endometrium. Cells lining the larger glands are compressed. Diagnosis: Endometriosis of the umbilicus.

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# WHOLE BLOOD BY INFUSION AND TRANSFUSION IN INFANCY

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IN many of the severe crises of infancy, the difference between recovery or death depends on a powerful temporary supporting restorative.

Nothing will provide this so well as blood.

The most effectual method of giving blood is by transfusion. Infusion is helpful, and may be sufficient, but should not be regarded as more than an approach to transfusion.

Infusion is useful chiefly to improve powers of coagulation in hemorrhagic diatheses, to immunize against measles, or to improve resistance to poliomyelitis, pertussis, and other contagious diseases.

The quantity of blood to be transferred by infusion is restricted, 20 to 30 cubic centimeters being the usual upper limits. In transfusion the upper limit may reach 10 cubic centimeters per pound of body weight, or even more if there has been loss of blood volume.

Infusion is usually given deep in the buttock, the thigh, the back, or the abdominal wall.

Infusion requires no preliminary typing or grouping. Blood from any healthy Wassermann-free and malaria-free donor may be used. It can be given with or without citrating. The citrated blood is absorbed more quickly, and is just as effectual. The only objection is a very infrequent reaction which may be ascribed to the sodium citrate (.2 of 1 per cent), used to prevent clotting.

Transfusion requires pretesting of bloods for compatibility. Though infants seldom determine their fundamental blood groups before a year of age, their cells and serum do react to other cells and serum. Consequently, it is unsafe to proceed without cross-agglutination tests. For best results, there should be no agglutination either way.

Transfusion almost always requires cutting down on a vein, though in larger children the external jugular or those veins in the ante-cubital space may be large enough to enter through the skin. A readily accessible vein is the internal saphenous, found just above the internal malleolus, and exposed through a half-inch, semi-circular incision.

Intraperitoneal transfusion is still used, though it is looked upon with misgivings by most operators, who have also abandoned the anteriorfontanel route as dangerous and unnecessary. It is much better to use a vein.

Whether blood for transfusion is to be citrated or not depends on the efficiency of the transfusing crew. Where speed is possible, it is not necessary. Where time may elapse, citration facilitates the procedure a great deal. There are those who advise avoidance of citration, if possible. Many others, myself included, see no disadvantages and many advantages in citration.

Reaction to transfusion is minimized by using as little rubber tubing as possible, by drawing blood from a donor who has not eaten for six to eight hours previously, and by adding a little adrenalin to the blood being injected, about one minim of 1-1000 adrenalin to a hundred cubic centimeters of blood.

One of the chief difficulties of transfusion is holding the needle in the vein while changing syringes. This is avoided by utilizing a small side-entry syringe as a needle carrier, and injecting the blood from larger syringes through this syringe by means of a short rubber tube to the side opening. As many injections may be made as desired without touching the needle.

Transfused blood is a boon in cases of melena, anemia, hemorrhage, marasmus, septicemia, chronic or severe infection, intoxication, digestive intolerance, hemolytic diseases, shock, and preoperatively. Numerous other indications are listed. In fact, there are probably more occasions for it in infancy than in later life.

Transfusion in pediatric cases should not be left as a last resort, but should be employed freely as an early-stage resource of immense value.

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Long Beach Controls Dogs.—A determined drive against stray dogs has been started in Long Beach in order to check the spread of rabies in the community and in its vicinity. Strict enforcement of the dog license ordinance will result, it is expected, in the impoundment of six thousand dogs. It is estimated that there are twelve thousand dogs in Long Beach, but only three thousand licenses have been issued annually. Many s ray dogs are brought to Southern California cities by tourists and left to fend for themselves. Stray dogs will be picked up and confined at the animal shelter, which will be under the direct supervision of Dr. S. G. Arnold, city health officer.